

REMARKS

Status of the Claims

Claims 1-10 are pending in the application. Claims 1-10 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicant regards as the invention; Claims 1-5 were rejected under 35 U.S.C. §102 (b), as allegedly being anticipated by U.S. Patent No. 5,868,562 issued to *Wantanabe et al.*, (*Wantanabe et al.*); and Claims 6-10 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Wantanabe et al.* in view of U.S. Patent Nos. 5,594,999, issued to *Best et al.*, (*Best et al.*),

By this reply, Claims 1 and 6 have been amended, no claims have been deleted, and no claims have been added. Thus, Claims 1-10 are pending in this application.

Rejections Under 35 U.S.C. §112

Claims 1-10 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that applicant regards as the invention.

Claims 1 and 6 have been amended to more particularly point out and distinctly claim the subject matter that Applicant regards as the invention. Claims 2-5 and 7-10 depend directly or indirectly on independent Claims 1 and 6, respectively; and include every aspect therein. As such, Applicant respectfully submits that Claims 2-5 and 7-10 are also in condition for allowance and request the rejections be withdrawn.

Rejections Under 35 U.S.C. §102

The Examiner has rejected Claims 1-5 under 35 U.S.C. §102(b), as allegedly being anticipated by U.S. Pat. No. 5,868,562, issued to *Wantanabe et al.* Applicant respectfully traverses the rejection of Claims 1-5.

Wantanabe et al. is directed to a paint drying furnace for baking and drying paint films on painted objects following a painting process and discloses a housing 1, a connection 4 for intake air, and a connection 6a, 6b, 6c for exhaust air. *Wantanabe et al.* discloses “a combustion type radiator heating device 19a,” (see *Wantanabe et al.*, column 5, lines 18-26), however, *Wantanabe et al.* fails to disclose a catalytic radiator. Instead, *Wantanabe et al.* discloses

radiator panels 7 wherein the radiating surfaces 7a are heated by passing a heat source of hot gas through the inner gas passages ip” See, *Wantanabe et al.*, column 5, lines 9-14. And although *Wantanabe et al.* discloses catalyst layers s, these layers are used in conjunction with a cleaning device 12 and burner b for cleaning “the exhaust gas EA by burning paint solvent vapor” See *Wantanabe et al.*, column 4, lines 10-16 and Figure 1, wherein the device 12 is configured outside the furnace’s interiors 1a, 1b, and 1c. As such, there is no suggestion within *Wantanabe et al.* for using the device 12 as a catalytic radiator for drying objects.

Also, because *Wantanabe et al.* fails to disclose a catalytic radiator, it also fails to disclose “at least one connection for combustion gas” of a catalytic radiator as required by Applicant’s independent Claim 1 (and 6). In fact, element b of *Wantanabe et al.* is disclosed as a burner(s), not a catalytic radiator.

Additionally, *Wantanabe et al.* fails to disclose Applicant’s claimed element of “at least one connection for combustion air, connected to the catalytically active layer via an air duct.” In contrast, *Wantanabe et al.*’s elements 9b and 9c of Figure 5—alleged by the Examiner as equivalents to the connection for combustion air—are in fact, air ducts for circulating hot gases and not an air duct for combustion air.

Furthermore, *Wantanabe et al.* fails to disclose Applicant’s claimed element wherein “the connection of the drier for intake air is connected exclusively to the connection of the catalytic radiator for combustion air.” In contrast, *Wantanabe et al.* discloses the intake air (fresh air OA, see for example, *Wantanabe et al.*, column 4, lines 55-60 and Figure 1) being heated by heating devices 19b, 19c, and heat exchanger 15. See *Wantanabe et al.*, column 4, lines 25-31 and column 6, lines 10-14.

Moreover, the isolating layer disclosed by *Wantanabe et al.* does not provide the patentably functional equivalent results of Applicant’s claimed “heat resistant design” wherein no cooling is necessary—and is a feature of the material used and independent of time. An isolating layer may prevent transfer of heat to an object as a function of time. In steady state, the isolated object will reach the outside temperature except for losses by thermal conduction. And the use of an isolating layer in general will consume more room for the isolated object, and would be extremely unfavorable in the case of catalytic radiators because an isolated radiator would not be able to serve as a heat source, as is used in the present invention. Therefore, there

is no equivalence between Applicant's claimed element of a catalytic radiator of heat resistant design and the isolating layer disclosed in *Wantanabe et al.*

Because *Wantanabe et al.* fails to disclose, teach, or suggest each and every element of Applicant's independent Claim 1, Applicant respectfully submits that independent Claim 1 is in condition for allowance and requests the rejection be withdrawn. Dependent Claims 2-5 depend directly or indirectly on Claim 1 and include every aspect therein. As such, Applicant respectfully submits that Claims 2-5 are also in condition for allowance and requests the rejections be withdrawn.

Rejections Under 35 U.S.C. §103

Claims 6-10 have been rejected as being unpatentable over *Wantanabe et al.*, in view of U.S. Patent No. 5,594,999, issued to *Best et al.* (*Best et al.*). Applicant respectfully traverses the rejection of these claims.

Referring to independent Claim 6, *Wantanabe et al.* fails to disclose infrared radiation. *Best et al.* is apparently relied upon to compensate for this shortcoming of *Wantanabe et al.*, however, as shown above, *Wantanabe et al.* fails to disclose each and every element of Applicant's claimed invention; namely, *Wantanabe et al.* fails to disclose catalytic radiators and catalytic radiators being of heat resistant design. Moreover, *Wantanabe et al.* fails to disclose "all the intake air supplied to the drying chamber . . . is routed as combustion air via the catalytically active layer of the catalytic radiator." See *Wantanabe et al.*, Fig. 1. That is, circulating gases RA are not lead to a catalytic radiator in at least two respects: (1) there is no catalytic radiator, and (2) the gases RA are circulated instead of being fed to blower Fe.

Best et al. fails to disclose, teach, or suggest many of the same claimed elements that *Wantanabe et al.* lacks. Namely, *Best et al.* fails to disclose at least a catalytic radiator and "all the intake air supplied to the drying chamber . . . is routed as combustion air via the catalytically active layer of the catalytic radiator." Because *Wantanabe et al.*, alone or in combination with *Best et al.*, fails to disclose, teach, or suggest each and every element of Applicant's independent Claim 6, Applicant respectfully submits that independent Claim 6 is in condition for allowance and requests the rejection be withdrawn. Dependent Claims 7-10 depend directly or indirectly on Claim 6 and include every aspect therein. As such, Applicant respectfully submits that Claims 7-10 are also in condition for allowance and requests the rejections be withdrawn.

CONCLUSION


Based on the above, Applicant submits that Claims 1-10 should now be in condition for allowance and respectfully requests reconsideration of the rejections and passage to allowance of all claims.

Should anything further be required, a telephone call to the undersigned at (312) 226-1818 is respectfully invited.

Respectfully submitted,

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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on November 8, 2004.

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